



Venema system integration:  
different individual  
process functions are  
linked together

# Projects

Venema Automations Ltd



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AUTOMATION

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Member of the **SHC** GROUP

# VENEMA AUTOMATION

## Company



Venema Automation BV



Reception space



Design department



Production department

## Markets: - Food industry



Automatic Beet laboratory



Analysing quality of tobacco

## - Research laboratory



Sampling / Analysing system



Sampling / Analysing system

## - Waste water purifications



Compressed mud sampling



Mud sampling

## - Equipments and instruments



Inline Lid Machine (ILD-25)



Tile - manipulator



**General**

We develop products and services on a customer basis. That means that in solving the problem we analyse the industrial process of the customer first, develop a concept of the solution in cooperation with the customer in order to confirm the correctness of interpretation of the problem and make the offer after acceptance of the concept by the customer.



**Projects regarding sampling as part of an industrial process**

In the course of years we have gained expertise in for instance the following sampling methods:

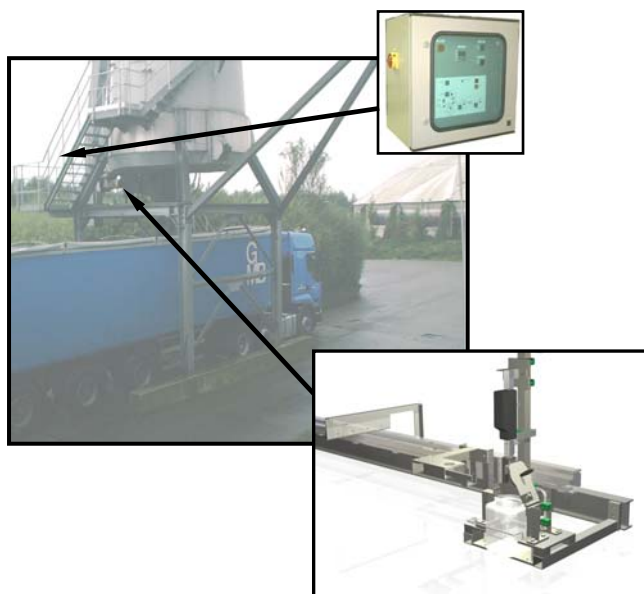
Sampling by pricking into solid material,



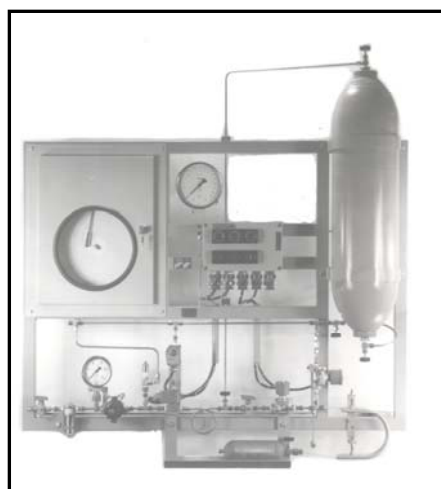
Sampling rather fixed material by screwtransporter,



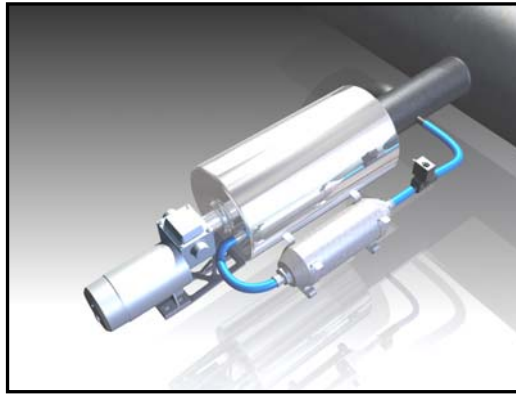
Sampling rather fixed material by moving a spoon into a stream of material,



Sampling gas by using a bypass and a solenoid valve,



Sampling liquid by using the plunger-principle,



**Projects for handling the samples as part of a process**

Handling the samples of beetsugar,



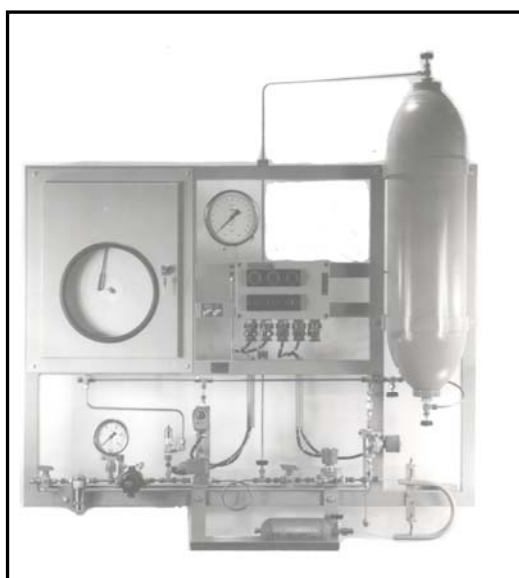
Handling the samples of potatos,



Handling the samples of tobacco,



Handling the samples of gas



Handling the samples of fixed material,



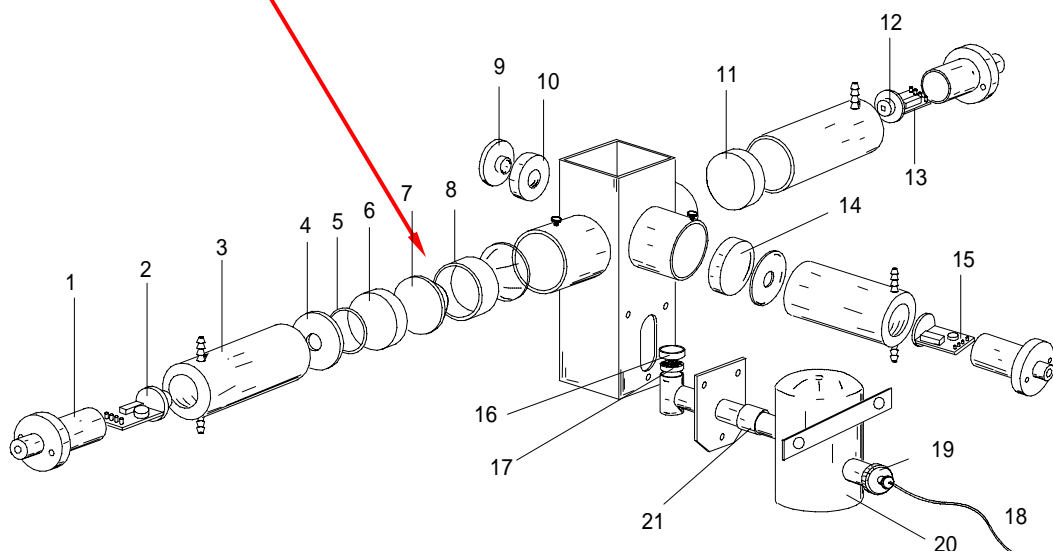
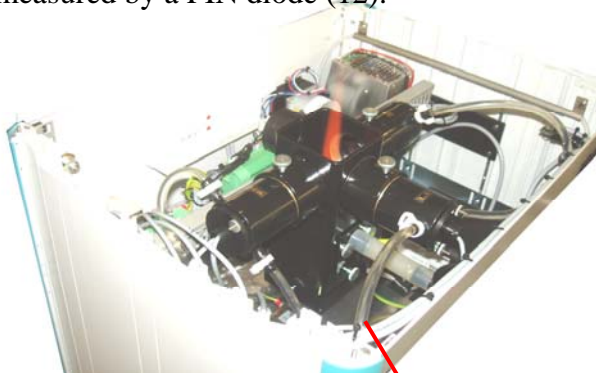
Handling the samples of liquids,



## Projects for measuring and analyzing the samples as part of a process

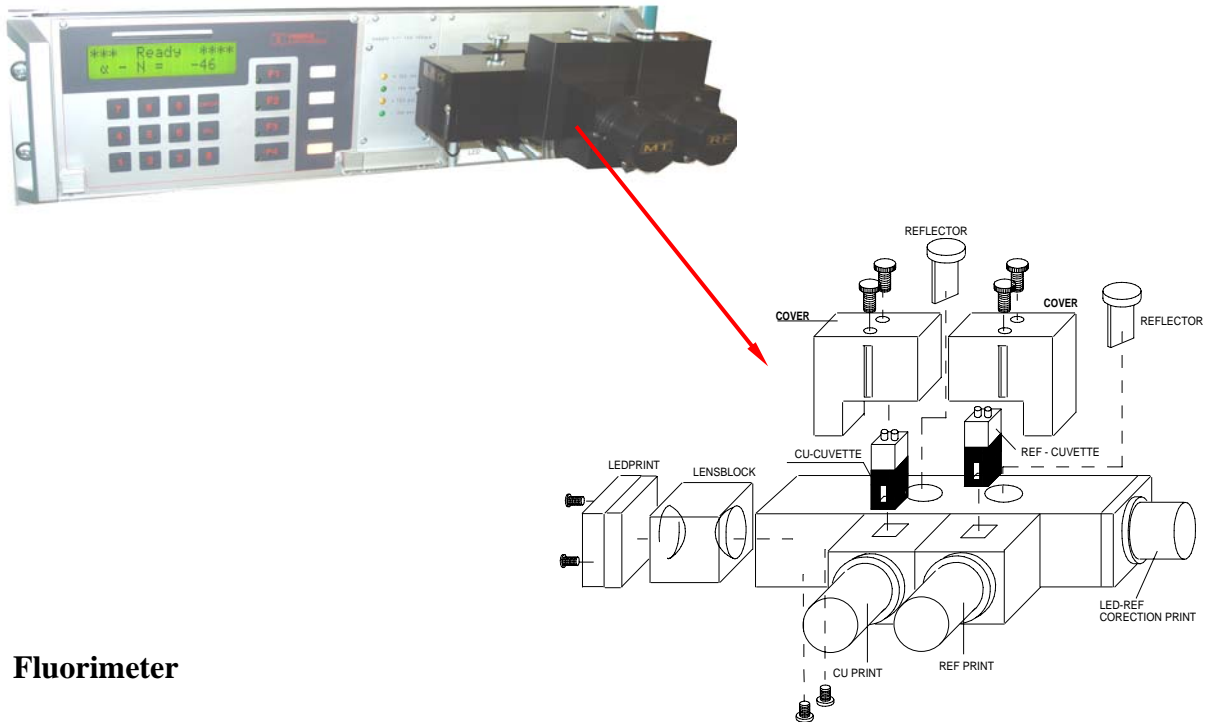
### Flame photometer

Measuring potassium and sodium by spraying fluid into a flame. The coloring of the flame is measured by a PIN diode (12).



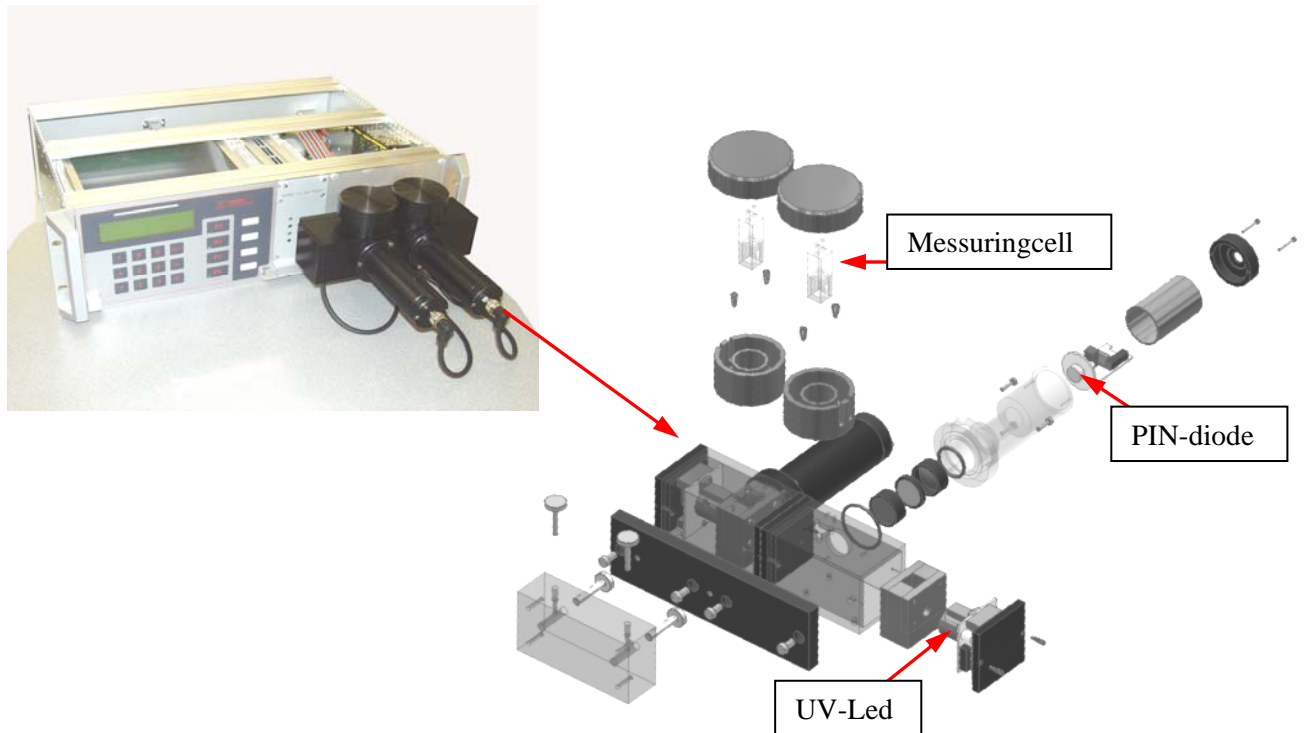
## Colorimeter

Measuring alpha-amino nitrogen by means of a copper-nitrate solution, alpha-amino nitrogen colors this solution more or less blue



## Fluorimeter

Measuring alpha-amino nitrogen in liquids by means of a buffered orthftal-aldehyde solution. UV-light is beamed into the liquid, fluorescence arises through the presence of alpha-amino nitrogen, this light is measured by a PIN-diode.



## Invertmeter

The determination of glucose and fructose in sugar solutions. By beaming UV-light into a sample which is heated up to 90 °C and by adding the reagent benzamedine, fluorescence arises. This fluorescence is measured by a photomultiplier.



## Condensate-flame photometer

Searching for sugar parts in proceswater. On the basis of a relation between potassium and sugar of 1: 100 the presence of sugarparts is shown by detecting potassium (0.2 ppm) with a flamephotometer.



## Automatic fraction determination

To determine automatically the sieve fractions of a big number of samples from sample trays in order to distract the quality of tobacco.



## Dosing fluids

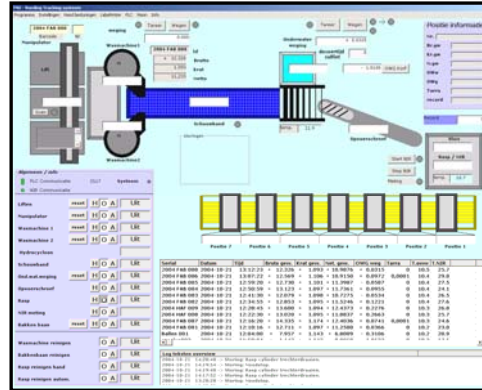
Fluid dosing on the basis of weight up to a accuracy of 0,05gr



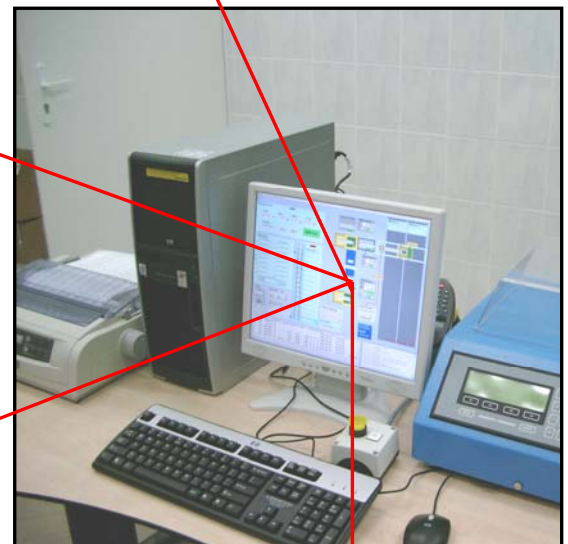
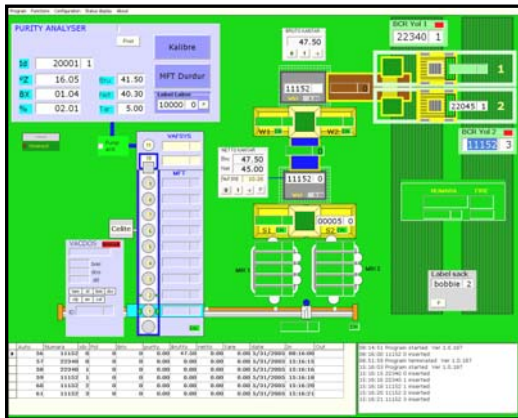
## For registration by tracking and tracing

Development of software in order to track and trace the samples and to register all relevant information during the process.

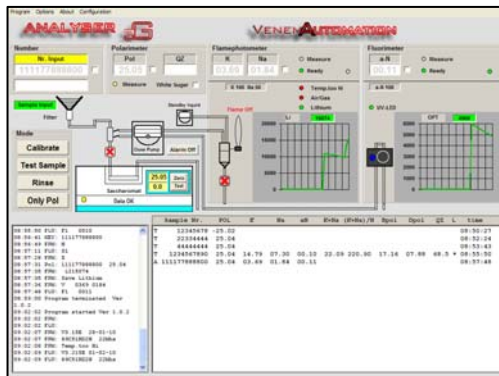
### Tracking Potatos



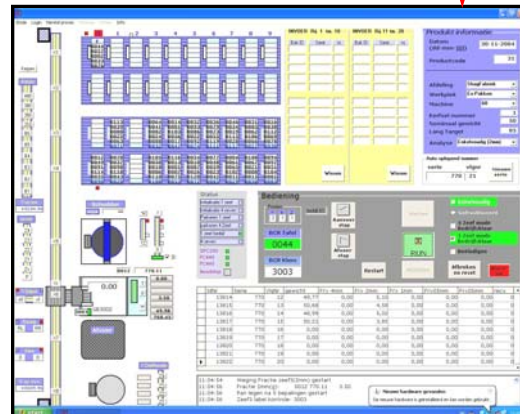
### Tracking Beetsugar



### Tracking Liquids



### Tracking Tobacco



# VENEMA AUTOMATION

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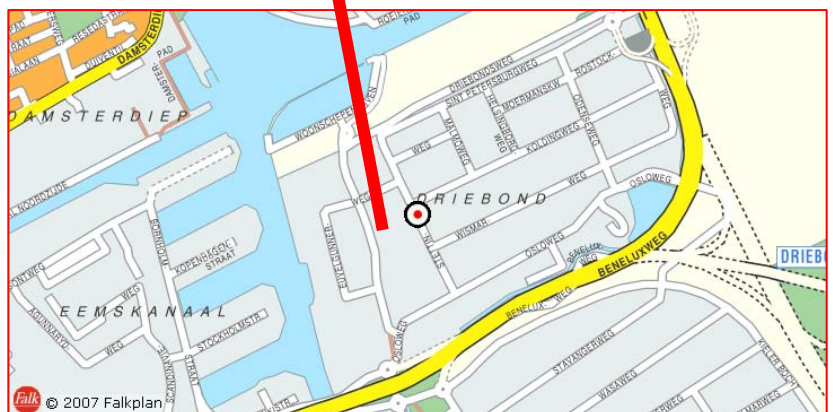
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